



General Purpose Valves  
Catalog No. CB-03-1SA

3-port solenoid valve with spool position detection

# SNP Series

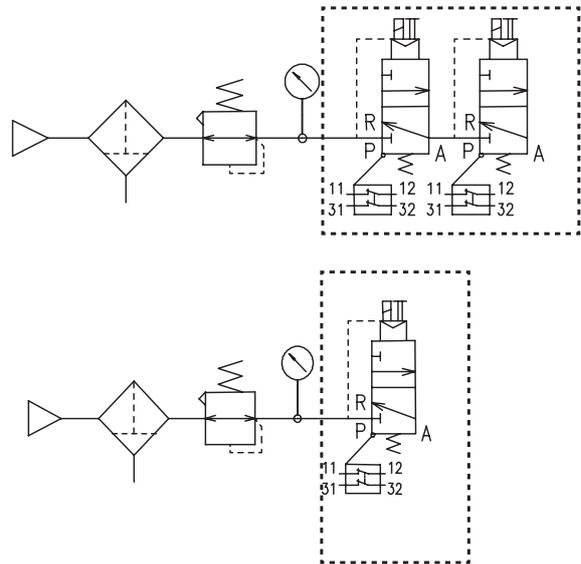
● Port size: Rc3/8 to 3/4

## Spool position detection for reliable open/close detection Module connection also allows double breaker circuit.

### Features

- ◆ Serves as an electromagnetic residual pressure discharge valve in pneumatic systems.
- ◆ Main valve spool with safety type limit switch Signal output of valve open/close is possible by detecting the position.
- ◆ Two modules can be connected to configure a double breaker circuit.
- ◆ Can be modular-integrated into the F.R.L. unit.  
Reduces piping space.

### Example of system circuit



### Unit configuration example



### Specifications

Model	SNP		
Port size	Rc3/8	Rc1/2	Rc3/4
Actuation	NC (Normally Closed)		
Fluid pressure supply port	Port P		
Working fluid	Compressed air		
Proof pressure MPa	1.05		
Working pressure range MPa	0.2 to 0.7		
Fluid temperature °C	5 to 60		
Ambient temperature °C	-5 to 60		
Weight kg	0.8(1.7) *1		1.8(3.7) *1
Orifice size mm	14.8 or equiv.		25.4 or equiv.
Valve seat leakage	1 or less (at pneumatic pressure 0.2 to 0.7 MPa)		
Valve structure	Internal pilot balance poppet structure		
Mounting orientation	Unrestricted		

\*1: Values in ( ) are the weight for modules

\*2: External pilot also supported. Contact CKD for details.

Electrical specifications	
Rated voltage (*3)	24 VDC
Power consumption (W) DC	2.0
Thermal class	B
Degree of protection (IEC standards 529)	DIN terminal box (Pg 9) DIN terminal box (M12-4P connector)
	IPX5

\*3: The voltage range must be within  $\pm 10\%$  of the rated voltage.

\*4: Contact CKD for details on reliability data (B10).

### Limit switch specifications

Limit switch specifications	D4N-1B31	D4N-9B31
Manufacturer model	D4N-1B31	D4N-9B31
Terminal	Pg13.5	M12-4P connector
Contact resistance	25 m $\Omega$ or less	
Minimum applicable load	5 VDC 1 mA resistance load	
Rated insulation voltage V	300	
Insulation resistance M $\Omega$	100	
Electric shock protection class	Class II	
Pollution degree (working environment)	3 (EN60947-5-1)	
Conditional short-circuit current A	100	

\* Refer to the manufacturer's catalog for details.

### Flow characteristics

Model No.		P→A		A→R	
		C[dm <sup>3</sup> /(s·bar)]	S (mm <sup>2</sup> )	C[dm <sup>3</sup> /(s·bar)]	S (mm <sup>2</sup> )
Single unit	SNP-10A	13	64	14	70
	SNP-15A	15	76	16	80
	SNP-20A	34	170	36	180
2 stations	SNP-10A	10	50	14	70
	SNP-15A	12	59	16	80
	SNP-20A	26	130	36	180

P4  
Series

Pneumatic cylinders  
Pneumatic actuator  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components  
Pneumatic auxiliary components  
Speed controller

Fitting  
Auxiliary valve

Silencer  
Tube

Gas generator

Fluid control components

Motor specification  
Motorless specifications  
Electric actuator

# SNP Series

## How to order

### Compatibility table by variation

SNP	
Port size	Rc3/8, 1/2, 3/4
P4	●

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

## How to order

**SNP - 1R - 15A - 0 2HS L B3 S2 - 3 - P4**

● A Station No.

● B Port size

● C Sealant

● D Coil option

● E Limit switch

● F Bracket \*1, \*2

● G Silencer

● H Voltage

Code	Description			
<b>A Station No.</b>				
1R	Single unit (terminal box right-facing)			
1L	Single unit (terminal box left-facing)			
2	2 (2 modules)			
<b>B Port size</b>				
10A	Rc3/8			
15A	Rc1/2			
20A	Rc3/4			
<b>C Sealant</b>				
0	NBR			
<b>D Coil option</b>				
2 G	DIN terminal box			
2HS	DIN terminal box with lamp/surge suppressor			
2J	DIN terminal box (M12-4P connector)			
2KS	DIN terminal box with lamp/surge suppressor (M12-4P connector)			
<b>E Limit switch</b>				
L	Pg13.5 (D4N-1B31: OMRON)			
M	M12-4P connector (D4N-9B31: OMRON)			
<b>F Bracket *1</b>				
		10 A	15 A	20A
Blank	No option	●	●	●
B3	With bracket (2000 Series, 3000 Series)	●	●	□
B4	With bracket (4000 Series)	●	●	□
B8	With bracket (8000 Series)	□	□	●
<b>G Silencer</b>				
Blank	No option			
S2	Resin			
<b>H Voltage</b>				
3	24 VDC			

## ⚠ Precautions for model No. selection

\*1: The bracket can be selected when A Station No. is "2".

\*2: The bracket option "B8" can be selected only for 20A.

\*3: Silencer is attached to the product.